UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG ____ ELECTRIC LOGS ____ FILE X WATER SANDS ____ LOCATION INSPECTED ____ SUB. REPORT/ABD ____

DATE FILED	SEPTEMBER 10, 1993		
LAND: FEE & PATENTED	STATE LEASE NO	PUBLIC LEASE NO	INDIAN NOG 8702-1116
DRILLING APPROVED	SEPTEMBER 1, 1992		
SPUDDED IN			
COMPLETED	PUT TO PRODUCING		
INITIAL PRODUCTION			
GRAVITY API			
GOR			
PRODUCING ZONES			
TOTAL DEPTH			
WELL ELEVATION			
DATE ABANDONED	PA 9-7-94		
FIELD	WILDCAT		
UNIT	NA		
COUNTY	SAN JUAN		
WELL NO	TOWER 1F WELL	API NO. 43-037-31729	
LOCATION	2150' FNL FT. FROM (N) (S) LINE	2380' FWL FT. FROM (E) (W) LINE	SE NW 1/4 - 1/4 SEC 1

TWP	RGE	SEC	OPERATOR	TWP	RGE	SEC	OPERATOR
40S	25E	1	CHUSKA ENERGY COMPANY				

C NFIDENTIAL

Form 3160-3
(December 1990)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires December 31, 1991

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5 LEASE DESIGNATION AND SERIAL NO: NOG 8702-1116

6 IF INDIAN, ALLOTTEE OR TRIBE NAME: Navajo Tribal

1a TYPE OF WORK: DRILL [X] DEEPEN [ ]

7 UNIT AGREEMENT NAME: N/A

b TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [ ]

8 FARM OR LEASE NAME, WELL NO: Tower 1F

2 NAME OF OPERATOR: Chuska Energy Company

9 API WELL NO:

3 ADDRESS AND TELEPHONE NO: 3315 Bloomfield Highway, Farmington, NM 87401

10 FIELD AND POOL, OR WILDCAT: Wildcat

4 LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: ~~2290~~ 2150' FNL & ~~2550~~ 2350' FWL

11 SEC., T., R., M., OR BLK AND SURVEY OR AREA

At proposed prod zone: Same

1-40S-25E

14 DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 8 miles north of Montezuma Creek, Utah

12 COUNTY OR PARISH: San Juan | 13 STATE: Utah

15 DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT (Also to nearest drlg unit line, if any)	16 NO OF ACRES IN LEASE	17 NO OF ACRES ASSIGNED TO THIS WELL
660'	49,997	

18 DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DRILLING COMPLETED OR APPLIED FOR, ON THIS LEASE, FT	19 PROPOSED DEPTH	20 ROTARY OR CABLE TOOLS
660'	~~6130'~~	Rotary

21 ELEVATIONS (Show whether DF, RT GR, etc.): 5167' GR/5180' KB

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4.

22 APPROX DATE WORK WILL START*: March '92

23 PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	K-55, 8 5/8"	24.0	500'	Class 'G'/2% CaCl/1/4 celloflake
7 7/8"	K-55, 5 1/2"	15.5	6000'	Class 'G'/2% CaCl/1/4 celloflake

SEE ATTACHED FOR 10 POINT DRILLING PLAN AND DETAILED DRILLING PROGRAM

CONFIDENTIAL

RECEIVED
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92-6 PM 1:28
FARMINGTON, N.M.

"APPROVAL OF THIS ACTION DOES NOT WARRANT OR CERTIFY THAT THE APPLICANT HOLDS LEGAL OR EQUITABLE TITLE TO THOSE RIGHTS IN THE SUBJECT LEASE WHICH WOULD ENTITLE THE APPLICANT TO CONDUCT OPERATIONS THEREON. CONDITIONS OF APPROVAL, IF ANY, ARE ATTACHED."

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM If proposal is to deepen, give data on present productive zone and proposed new productive zone If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths Give blowout preventer program, if any

24

SIGNED Bruce A. Wade TITLE Operations Manager DATE 3-2-92

(This space for Federal or State office use)

PERMIT NO 43-037-31724 APPROVAL DATE

APPROVED AS AMENDED
SEP 01 1992
RLH 9-3-92

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY

APPROVED BY _____ TITLE _____ DATE _____

(for) AREA MANAGER

*See Instructions On Reverse Side OPERATOR

Title 18 U S C Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Well Location Plat

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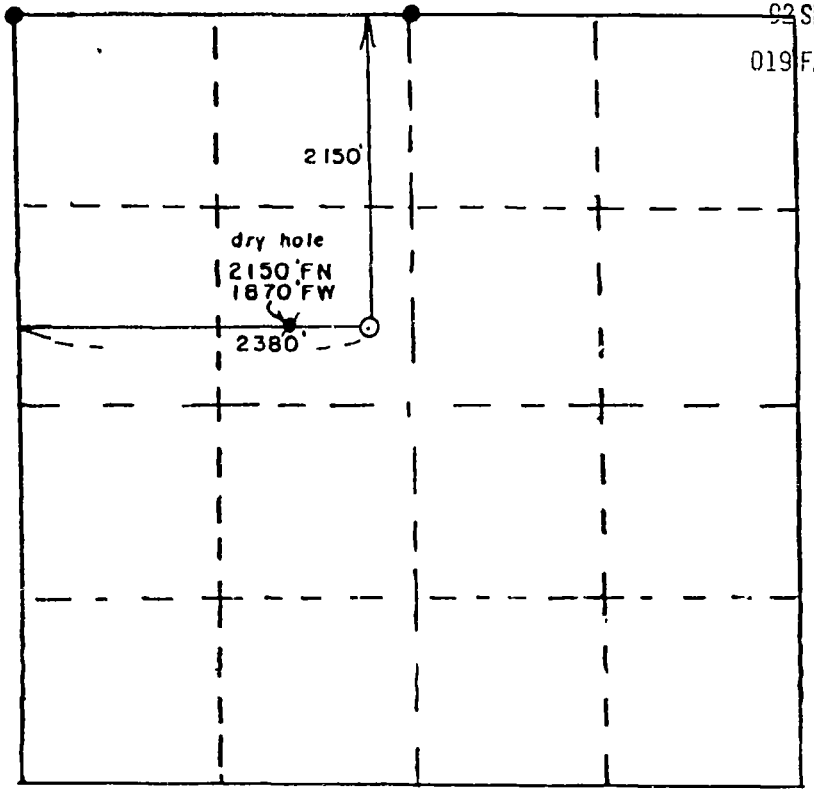
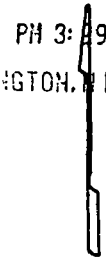
92 SEP -1 PM 3:39
019 FARMINGTON, N. M.





REGISTERED LAND SURVEYOR
No. 5705
GERALD G. HUDDLESTON
STATE OF UTAH

WELL LOCATION DESCRIPTION:

CHUSKA ENERGY CO., Tower 1-F
2150'FNL & 2380'FWL
Section 1, T.40 S., R.25 E., SLM
San Juan County, UT
5170' ground elevation
State plane coordinates from seismic control:
X = 2,690,993 Y = 253,800
sta 352, line 91P3-6
found shot points 356, 357 & 349

The above is true and correct to my knowledge and belief.

13 April 1992

Gerald G. Huddleston, LS

Huddleston Land Surveying Dove Creek, CO Cortez, CO 303-565-3220

CHUSKA ENERGY COMPANY

10 POINT DRILLING PLAN
Tower 1F
Section 1, Township 40 South, Range 25 East
2230' FNL & 2550' FWL
San Juan County, Utah

SURFACE FORMATION:

Geological name of surface formation: Morrison

ELEVATION:

Surface elevation is 5,167' GR/ 5,180 KB

ESTIMATED FORMATION TOPS

DEPTH	FORMATION	SUB-SEA ELEV.
1175'	Navajo	+4005'
1797'	Chinle	+3383'
2871'	DeChelly	+2309'
2887'	Organ Rock	+2293'
3617'	Cedar Mesa	+1563'
4760'	Hermosa	+ 420
5705'	Upper Ismay	-525'
5843'	Lower Ismay	-663' Secondary
5950'	Desert Crk	-770' Primary
6033'	Akah	-853'
6130'	Total Depth	-950'

4. PROPOSED CASING/CEMENTING PROGRAM

	DEPTH	SIZE	WEIGHT	GRADE	COUPLING
SURFACE	500'	8 5/8"	24.0 ppf	K-55	STC
PROD.	6000'	5 1/2"	15.5 ppf	K-55	STC

SURFACE CEMENTING:

371 sx Class 'G' Cement with 2% CaCl and 1/4 lb/sk Celloflake. Weight = 15.8 ppg, yield = 1.15 ft3/sk. Slurry volume will be calculated at 100% excess over annular volume.

PRODUCTION CEMENTING:

First Stage

TD to 3500' (stage collar @ +3500'). Lead with 168 sx Class 'G' cement, 65:35 Pozmix with 6% gel and 1/4 lb/sk Celloflake. Weight = 12.7 ppg, yield = 1.85 ft3/sk. Tail with 100 sx Class 'G' cement with 2% CaCl2. Weight = 15.8 ppg, yield = 1.15 ft3/sk. Total of 426 ft3.

SECOND STAGE

3500' to surface. Lead with 271 sx Class 'G' cement, 65:35 Pozmix with 6% gel and 1/4 lb/sk Celloflake. Weight = 12.7 ppg, yield = 1.85 ft/sk. Tail with 100 sx Class 'G' cement with 2% CaCl2. Weight = 15.8 ppg, yield = 1.15 ft3/sk. Total of 616 ft.3

NOTE: Exact slurry volumes for the production string will be adjusted according to the caliper log which will be run prior to cementing. Special adjustments may be necessary if significant amounts of salt are drilled.

5. BLOWOUT PREVENTER (SEE ATTACHED SCHEMATICS)

As abnormal pressure is not anticipated, a 2000 psi BOP system would be sufficient for the drilling of this well. However, due to availability constraints, a 3000 psi system will be used, as per attached Exhibits "A" and "B". This will be a 10" x 900 series double ram preventer, equipped with a set of pipe and blind rams.

An accumulator system, with a pressure capacity sufficient to operate the rams three complete cycles without rig power, will be required as part of the rig equipment.

6. PROPOSED MUD PROGRAM

Surface to 3500'

Fresh water, gel, lime and native solids. Weight 8.3 - 8.7 ppg. Gel/lime sweeps are necessary for hole cleaning.

3500' to TD

Low solids, non-dispersed polymer system. Weight 8.6 - 8.8 ppg. Gel/lime sweeps as hole conditions dictate for hole cleaning. Fluid loss to be maintained at 15 cc or less. Fluid loss to be further reduced to 10 cc or less prior to coring, logging or DSTS.

7. AUXILIARY EQUIPMENT

A. A kelly cock will be installed during drilling operations, with handle available on rig floor.

B. Floor (stabbing) valves will be available, on the rig floor at all times, with necessary subs to fit all of the drilling assemblies.

C. Mud will be the circulating fluid. No abnormal formation pressures are expected.

8. WELL EVALUATION

Open hole electric logging program will consist of a minimum program of DLL-MSFL-SP-GR-Cal, FDC-CNL-GR-Lithodensity from TD - 4000'

Drill stem testing will be as per the wellsite geologists' recommendations, based on shows. A mud logging unit will be utilized during drilling operations from 4000' to TD.

9. ABNORMAL PRESSURES/GAS

Abnormal pressures are not anticipated. Monitoring of gas and hydrocarbon shows will be by wellsite mud logging unit. H2S gas is not anticipated, however, regular checks will be made while drilling the well.

10. TIMING

The drilling and evaluation of this well is estimated be 18 days. Anticipated drilling will be March'92.

DETAILED DRILLING PROGRAM

DATE:	February 25, 1992
WELL NAME:	Tower WELL NO.: 1F
LOCATION:	Section 1, T40 South, R25 East 2230' FNL & 2550' FWL San Juan County, Utah
ELEVATION:	5,167'GR/5,180'KB
TOTAL DEPTH:	6130'KB
PROJECTED HORIZON:	Primary Target is Desert Crk @ 5950' Secondary Target is lower Ismay @ 5843'

DRILLING, CASING AND CEMENTING PROGRAM

1. Move in and rig up rotary tools. Notify BLM of time of spud.

2. Drill mouse hole and rat hole. Mix mud prior to spudding well.

3. Drill 12 1/4" hole to +/- 515'. Use fresh water gel/ lime spud mud for drilling surface hole. Well bore inclination is not to exceed 1 degree at 500'. Deviation surveys will be run at least at 250' and at casing point.

4. Run 8 5/8", 24 lb/ft, K-55, ST&C casing to TD. Cement with 371 sx (427 ft3) of Class 'G' cement with 2% CaCl2 and 1/4 #/sk Celloflake (sufficient slurry volume to circulate cement to surface.)

5. W.O.C. a minimum of 4 hours prior to nippling up for BOP stack and related equipment. See BOP schematics for details.

6. Ensure that plug has been down at least 8 hours prior to commencing pressure testing procedures. Pressure test BOP to 2,500 psig for 30 minutes. Pressure test manifold and all related equipment to 2500 psig. Pressure test casing to 1500 psig for 30 min.

7. Drill out surface casing with 7 7/8" bit. Drill 7 7/8" hole to TD. Deviation surveys are to be taken every 500' or on a bit trip, whichever occurs first. Maximum allowable deviation will be 5 degree @ TD, with maximum allowable rate of change to be 1 degree per 100'.

8. Run open hole logs and evaluate. Coring and/or drill stem testing will be as per well site geologist's recommendation.

9. If the well is determined to be productive run 5 1/2" casing to TD., as per casing program in 10 Point Drilling Plan. Set stage cementing collar at +/- 3,500 ft. In addition to placing centralizers over potential production zones, they will also be run to cover the aquifer sands of the Navajo and DeChelly formations, as per BLM stipulations. Cement production casing in two stages as per cementing program in 10-Point Drilling Plan.

10. Nipple down BOPE. Set 5 1/2" casing slips and cut off casing. Install well head. Release drilling rig and move rig off location.

11. If well is non-productive it will be plugged and abandoned as per State, BLM, and Navajo Tribal stipulations.

Tower 1F
Section 1, Township 40 South, Range 25 East
2230' FNL & 2550' FWL
San Juan County, Utah

GENERAL COMPLETION PROCEDURE:

If the well is determined to be productive, move in completion rig. Perforate, acidize, and test each productive porosity zone. Completion work will commence after Sundry Notice approval is received. Detailed procedures will follow.

PLUGGING AND ABANDONMENT:

If the well is determined not to be productive, the well bore will be plugged as per BLM, State and BIA requirements.

Tower 1F
Section 1, Township 40 South, Range 25 East
2230' FNL & 2550' FWL
San Juan County, Utah

1. EXISTING ROADS

Shown on the attached topographic map are the existing roads in the immediate area. Outlined is the route to be followed to Montezuma Creek. Existing roads will be maintained, as needed, while operations are in progress.

2. PLANNED ACCESS ROAD

The access road will be as shown on the attached topographic map. The road will be maintained as necessary to prevent excessive damage to the existing terrain. The road will be upgraded if commercial production is established. Owing to the well's proximity to an existing road, no new road will be constructed to the location pad.

3. LOCATION OF EXISTING WELLS & TANK BATTERIES

There are no other producing wells or facilities in the immediate area.

4. LOCATION OF EXISTING AND PROPOSED FACILITIES

No production facilities are presently in place. Should the well prove to be productive, facilities (tank battery etc) will be sited on the drilling location pad.

5. LOCATION AND TYPE OF WATER SUPPLY

Water will be acquired from the San Juan River or McElmo Creek and/or Chuska Energy's yard and will be hauled using Chuska Energy Company water trucks, under State of Utah Division of Water Rights Permit Numbers 09-1724,(T64796) or 09-1723 (T64795).

6. SOURCE OF CONSTRUCTION MATERIAL

The need for additional construction materials is not anticipated. In the event that additional materials are required, they will be acquired either from private sources or with the approval of the Navajo Nation.

7. METHODS OF HANDLING WASTE MATERIAL

Trash will be contained on location in an enclosed bin. It will be hauled to an approved disposal site or burned on location if a burning permit is granted. The reserve pit will be lined as required, with an approved 7 mil liner, for containing drilling fluids. The pit will also be fenced. All drilling fluids, cuttings and chemical waste will be stored in the reserve pit. Liquid hydrocarbons will be stored in temporary storage tanks and hauled from location to approved sales facilities. The reserve pit will be emptied, back filled and restored to natural terrain status upon completion of drilling operations.

8. ANCILLARY FACILITIES

Chemical portable toilet facilities will be provided on location during drilling and completion operations. No camps or air strips are planned for this well.

9. WELL SITE LAYOUT

Attached is a surveyor's staking plat, cut and fill diagram and a schematic of the proposed rig layout.

10. PLANS FOR RESTORATION OF THE SURFACE

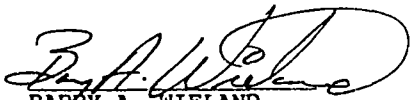
After drilling operations are completed, the location and surrounding area will be cleared of all remaining debris and materials not required for production. Compacted areas will be plowed or ripped to a depth of 12 to 16 inches before reseeding. The existing reserve pit will be used. After drilling operations are complete, drilling fluid in the reserve pit will be allowed to evaporate.
All remaining fluid in the pit will be disposed into an approved disposal site. The reserve pit will remain fenced during the evaporation and disposal process. The pit will then be covered and topsoil will be returned to the disturbed area. The terrain will be returned as near to its original condition as possible. Following operations, rehabilitation seeding will be in accordance with APD/BLM/BIA stipulations. There are no residents in the immediate area of the site.

11. OPERATORS REPRESENTATIVE

CHUSKA ENERGY COMPANY
3315 BLOOMFIELD HIGHWAY
FARMINGTON, NM 87401
BARRY A. WIELAND

12. CERTIFICATION

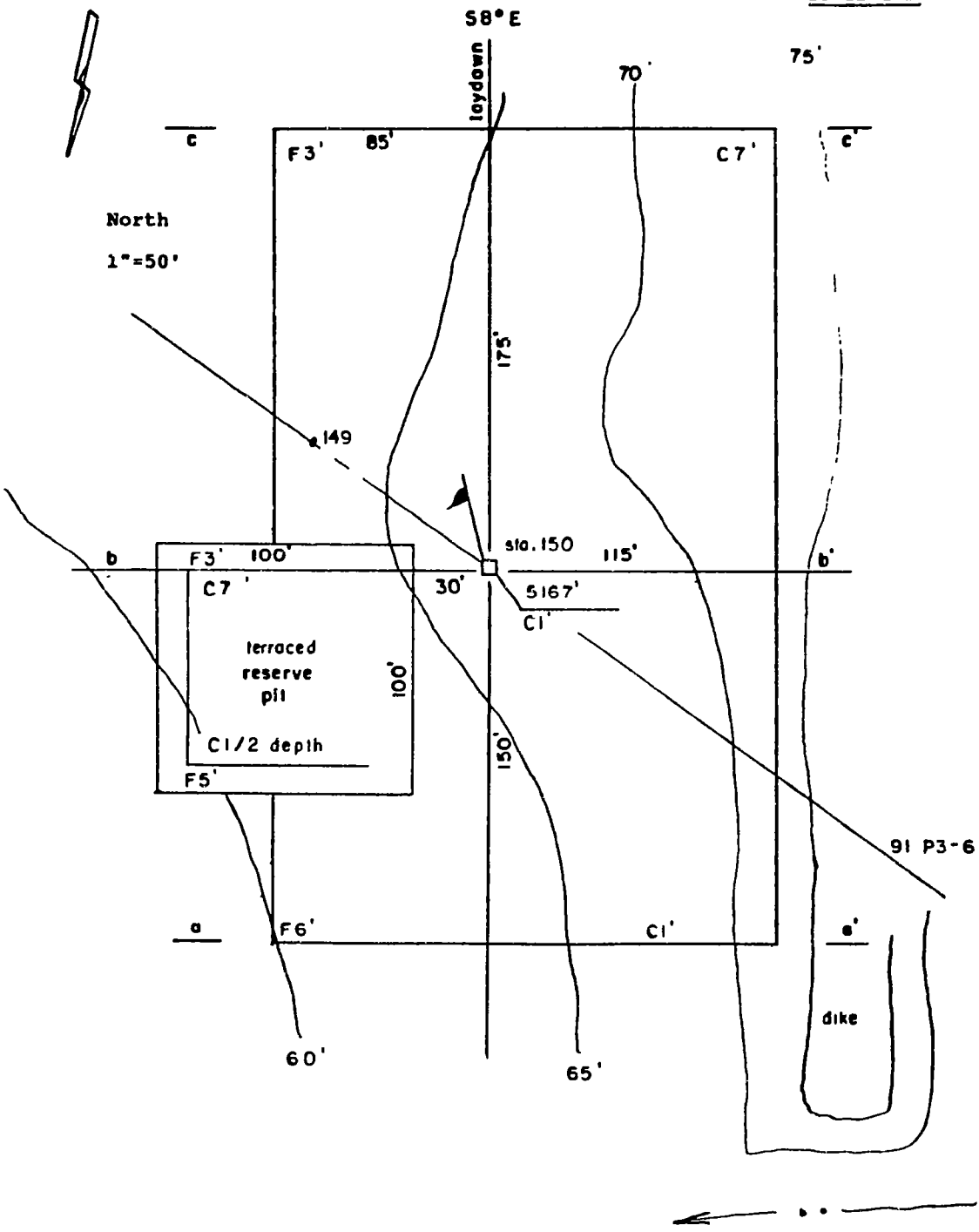
I hereby certify that either I, or persons under my direct supervision have inspected the proposed drill site and access route: that I am familiar with the conditions which presently exist: that the statements made in this plan are, to the best of my knowledge, true and correct and that the work planned will be performed by Chuska Energy, or its sub-contractors, in conformity with the terms and conditions under which it is approved.



BARRY A. WIELAND
OPERATIONS MANAGER

PLANVIEW SKETCH

Tower 1-F



CROSS SECTION

Tower 1-F

Cut //////
Fill

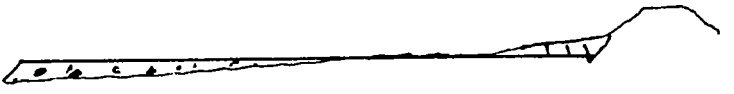
1"=50' vert. & horz.

c

c'

b

b'



a

a'

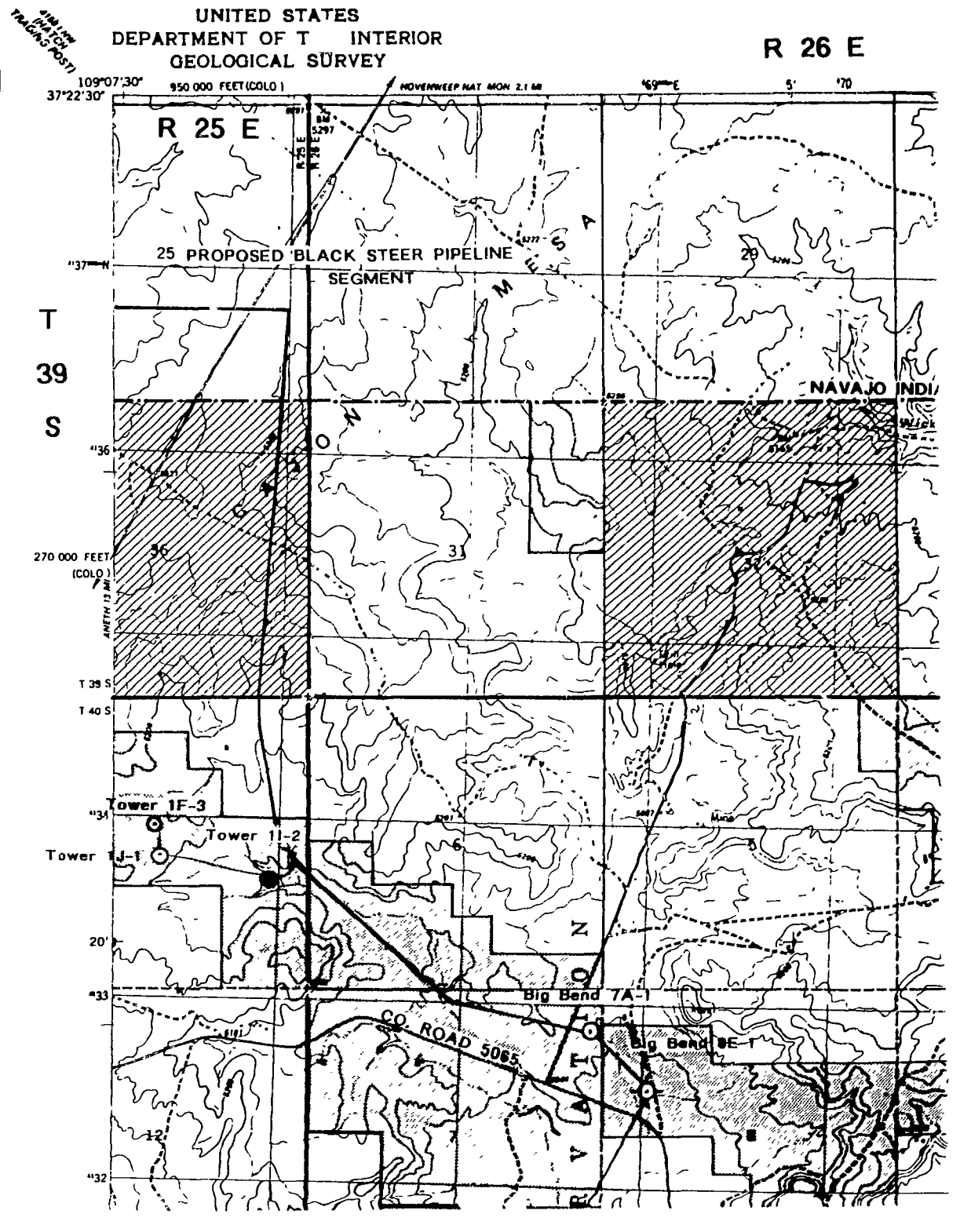

UNITED STATES
DEPARTMENT OF T INTERIOR
GEOLOGICAL SURVEY
R 26 E
R 25 E
25 PROPOSED BLACK STEER PIPELINE
SEGMENT
T
39
S
NAVAJO INDI
Tower 1F-3
Tower 11-2
Tower 1J-1
Big Bend 7A-1
Big Bend 8E-1
CO. ROAD 5065
270 000 FEET
(COLO.)
T 39 S
T 40 S

EXHIBIT "A"

BLOWOUT PREVENTER

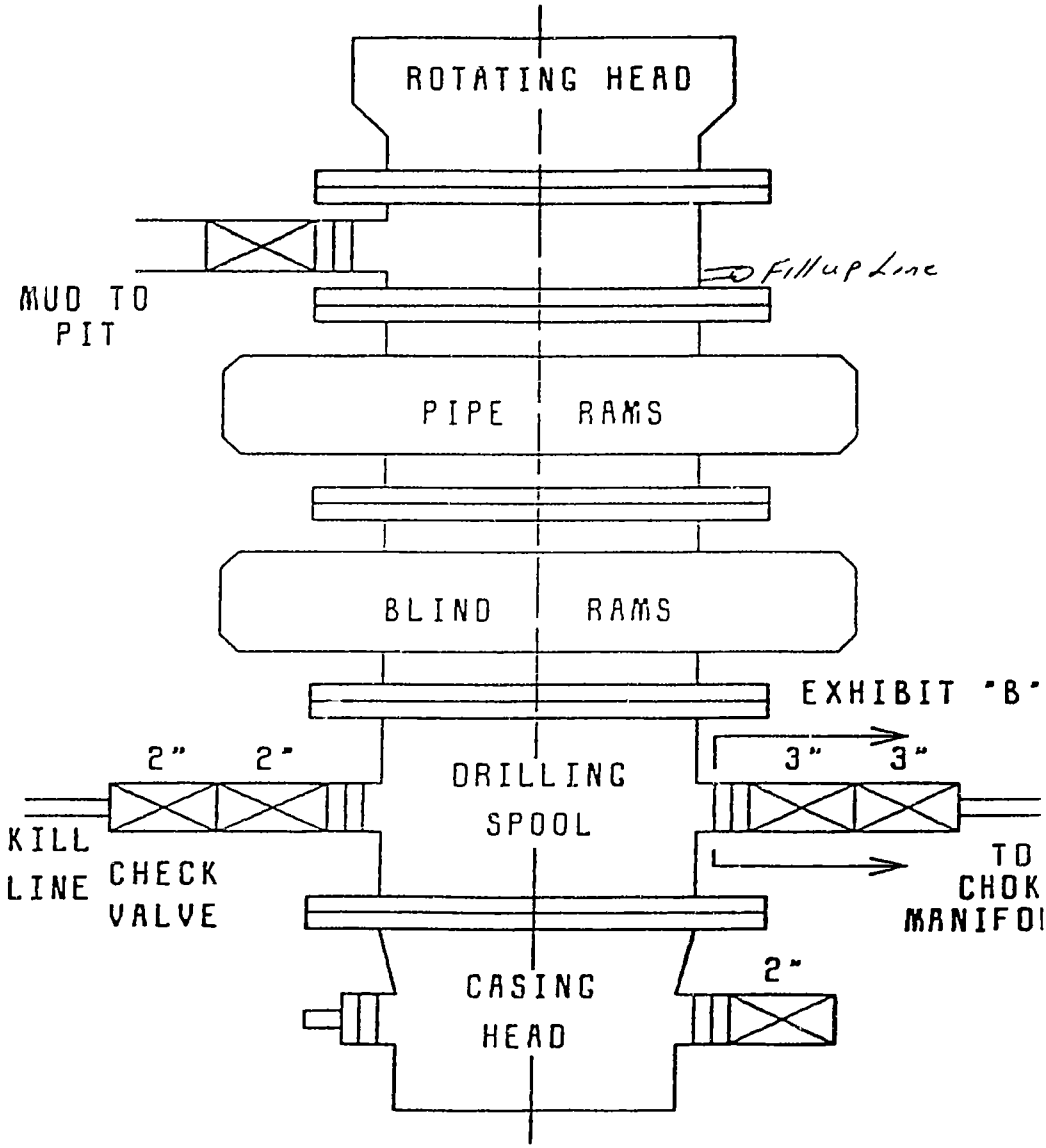
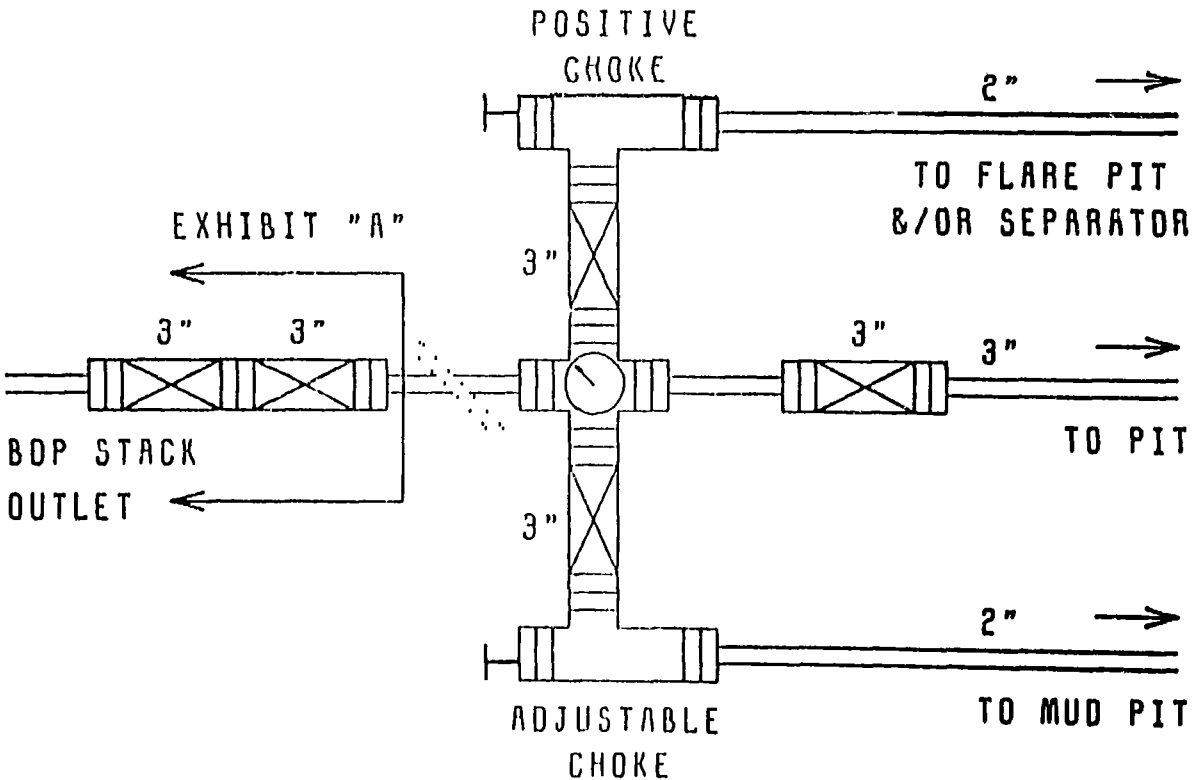


EXHIBIT "B"

CHOKE MANIFOLD



BLM CONDITIONS OF APPROVAL

Operator Chuska Energy Company Well Name 1F Tower

Legal Location 2150'FNL/2380'FWL Sec. 1 T. 40S R. 25E

Lease Number NOG-8702-1116 Field Inspection Date 12/18/91

The following stipulations will apply to this well unless a particular Surface Managing Agency or private surface owner has supplied to BLM and the operator a contradictory environmental stipulation. The failure of the operator to comply with these requirements may result in the assessment of liquidated damages or penalties pursuant to 43 CFR 3163.3 or 3163.4. A copy of these stipulations shall be present on location during construction, drilling and reclamation activity.

An agreement between operator and fee landowner will take precedence over BLM surface stipulations unless 1) the BLM determines that the operator's actions will affect adjacent Federal or Indian surface (43 CFR Part 3160), or 2) the operator does not maintain the well area and lease premises in a workmanlike manner with due regard for safety, conservation and appearance (43 CFR Part 3162.7-4), or 3) no such agreement exists (43 CFR Part 3160), or 4) in the event of well abandonment, minimal Federal restoration requirements will be required (43 CFR Part 3162.7-2).

I. Location and Access Road

A. Well area and lease premises will be maintained in a workmanlike manner with due regard to safety, conservation and appearance. All liquid waste, completion fluids and drilling products associated with oil and gas operations will be contained and then buried in place, or removed and deposited in an approved disposal site.

B. Surface disturbance and vehicular traffic will be limited to the approved location and approved access road.

C. Mud pits and blow pits will be constructed so as not to leak, break, or allow discharge of liquids or produced solids. At least half of the capacity of reserve pit must be in cut. The top of the outside wall of reserve pit should be smoothed-off with a minimum of one blade of width. The pit should have adequate capacity to maintain 2 feet of free board. Pits are not to be located in natural drainages. Pit walls are to be "walked down" by a crawler-type tractor following construction and prior to usage. Any plastic material used to line pits must be removed to below-ground level before pits are covered. The final grade of reserve pit (after reclamation) shall allow for drainage away from the pit area.

D. All unguarded pits (reserve/production/blow pits) containing liquids will be fenced with woven wire. Drilling pits will be fenced on three sides and once the rig leaves location, the fourth side will be fenced. All fencing must be a legal fence in accordance with New Mexico State Law. Liquids in pits will be allowed to evaporate, or be properly disposed of, before pits are filled and recontoured. (This office will be notified 24 hours prior to fluid hauling). Under no circumstances will pits be cut and drained. Aeration of pit fluids must be confined within the pit area. Upon completion of the well the reserve pit will be covered with screening or netting and remained covered until the pit is reclaimed. All production pits 16 feet in diameter or larger will be covered with screening or netting.

E. No gravel or other related minerals from new or existing pits on Federal land will be used in construction of roads, well sites, etc., without prior approval from the Surface Managing Agency.

F. Berms or firewalls will be constructed around all storage facilities sufficient in size to contain the storage capacity of the tanks, or the combined capacity of tanks if a rupture could drain more than one tank. Berm walls will be compacted with appropriate equipment to assure proper construction.

G. All roads on public land must be maintained in good passable condition.

H. A proposed use of pesticide, herbicide or other possible hazardous chemical on BLM land shall be cleared for use prior to application.

II. Cultural Resources (Archaeology)

A. DISCOVERY OF CULTURAL RESOURCES IN THE ABSENCE OF MONITORING: If, in its operations, operator discovers any previously unidentified historic or prehistoric cultural resources, then work in the vicinity of the discovery will be suspended and the discovery promptly reported to the BLM Area Manager. BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of the discovery and consult with the State Historic Preservation Officer in accordance with 36 CFR Section 800.11. Minor recordation, stabilization, or data recovery may be performed by BLM or a permitted cultural resources consultant. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any required treatment is completed. Failure to notify the BLM about a discovery may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act of 1979 (as amended).

B. DISCOVERY OF CULTURAL RESOURCES DURING MONITORING: If monitoring confirms the presence of previously unidentified cultural resources, then work in the vicinity of the discovery will be suspended and the monitor will promptly report the discovery to the BLM Area Manager. BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of the discovery and consult with the State Historic Preservation Officer in accordance with 36 CFR Section 800.11. Minor recordation, stabilization, or data recovery may be performed by BLM or a permitted cultural resources consultant. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any required treatment is completed.

C. DAMAGE TO SITES: If, in its operations, operator damages, or is found to have damaged any previously documented or undocumented historic or prehistoric cultural resources, excluding "discoveries" as noted above, the operator agrees at his/her expense to have a permitted cultural resources consultant prepare and have executed a BLM approved data recovery plan. Damage to cultural resources may result in civil or criminal penalties in

accordance with the Archeological Resources Protection Act of 1979 (as amended).

III. Reseeding and Abandonment

A. All surface areas disturbed during drilling activities and not in use for production activities, will be reseeded the first July-September period after reserve pit has been filled in and/or location abandoned. For producing locations, this should occur in the first 12 months after drilling is completed.

B. After top soil has been placed on location, compacted areas of well pad will be plowed or ripped to a depth of 12" before reseeding. The surface should be left rough to help retain rain fall. All seeding is recommended to be done between July 1 and September 15. Seeding will be done with a disc-type drill with two boxes for various seed sizes. The drill rows will be eight to ten inches apart. Seed will be planted between 1/2 inch deep and 3/4 inch deep. The seeder will be followed with a drag, packer or roller to insure uniform coverage of seed, and adequate compaction. Drilling of the seed will be done on the contour where possible. Where slopes are too steep for contour drilling a "cyclone" hand-seeder or similar broadcast seeder will be used, after preparation of an adequate seed-bed. Seed will then be covered to a depth described above by whatever means is practical. Mulching, excelsior netting and/or netting may be required on steep slopes.

C. After seeding remaining rocks and vegetation (trees, brush, etc.) should be placed on the seeded areas using back hoes or rubber tired front-end loaders, so as not to detract from the natural appearance of the area.

D. If, in the opinion of surface management agency, seeding is unsuccessful, lessee/operator may be required to make subsequent seedings.

E. If, upon abandonment of wells, the retention of access road is not considered necessary for the management and multiple use of the natural resources, it will be ripped a minimum of 12" in depth. After ripping, water bars will be installed. All ripped surfaces are to be protected from vehicular travel by construction of a dead-end ditch and earthen barricade at the entrance to these ripped areas. (Reseeding of the affected areas may be required).

BUREAU OF INDIAN AFFAIRS

SURFACE MANAGEMENT STIPULATIONS

TO BE INCLUDED IN APD

RECEIVED
BLM
92 AUG 27 PM 2:03
019 FARMINGTON, N.M.

COMPANY.....: Chuska Energy Co.

WELL NO.....: Tower I-F

DATE OF INSPECTION: December 18, 1991

PROVIDED BY.....: R Cornett

STIPULATIONS CHECKED APPLY ✓

✓1. ALL ABOVE GROUND STRUCTURES AND EQUIPMENT WILL BE PAINTED WITH THE FOLLOWING NON-GLARE COLOR.

___	BROWN	FED. STANDARD		595A - 30318
___	GREEN	FED. STANDARD		595A - 34127
___	GRAY	FED. STANDARD		595A - 36357
✓	SAND	FED. STANDARD		595A - 30277
___	MOBIL BEIGE 12-F-38			

✓2. COMPACTED AREAS WILL BE PLOWED OR RIPPED TO A DEPTH OF 12 TO 16 INCHES BEFORE RESEEDING. SEED WILL BE DRILLED TO A DEPTH OF .5 TO .75 INCH OR BROADCAST AND FOLLOWED BY A DRAG OR PACKER. IF BROADCAST, THE RECOMMENDED SEED MIX WILL BE APPLIED AT 150% OF THE RECOMMENDED RATE. THE FOLLOWING SEED MIX WILL BE USED.

SPECIES	LBS./ACRE/PLS
CRESTED WHEATGRASS	
SLENDER WHEATGRASS	
SMOOTH BROME	
ORCHARDGRASS	
YELLOW SWEETCLOVER	
SAINFOIN	
✓ WESTERN WHEATGRASS	5
SAND DROPSEED	
✓ ALKALI SACATON	1
INDIAN RICEGRASS	
GALLETA	
NEEDLE-N-THREAD	
SQUIRREL TAIL	
SIDE OATS GRAMA	
✓ FOUR-WING SALTBUSH	3
SHADSCALE	
WINTER FAT	

(PURITY X GERMINATION = PLS)

3. ✓ THE TOP 8 INCHES OF SOIL WILL BE SALVAGED, STOCKPILED, AND STABILIZED ON THE ___ SIDE/CORNER OF THE WELL PAD AND/OR IN THE "L" CORNER OF THE WELL PAD AND RESERVE PIT FOR USE IN REVEGETATING THE SITE.

4. NA UPON ABANDONMENT, THE WELL PAD WILL BE FENCED WITH A STANDARD FIVE-STRAND BARB WIRE FENCE, OR EQUIVALENT AND WILL HAVE NO GATES. THE FENCE WILL BE MAINTAINED FOR TWO YEARS TO ALLOW FOR SEEDING ESTABLISHMENT AND WILL THEN BE REMOVED.

5. ✓ ACCESS ROADS NOT NEEDED FOR THROUGH TRAFFIC WILL BE BARRICADED AND RESEEDED IN ACCORDANCE WITH #2. WATER BARS WILL BE CONSTRUCTED TO THE FOLLOWING SPECIFICATIONS.

% SLOPE	SLOPE DISTANCE
1 - 5%	200 FEET
5% - 15%	100 FEET
GREATER THAN 15%	50 FEET

6. ✓ AN EARTHEN BERM (24 INCHES/~~FEET~~ HIGH) WILL BE CONSTRUCTED AROUND THE PERIMETER OF THE WELL PAD, EXCEPT ON THE HIGH/CUT SIDE OF THE WELL PAD.

7. ✓ THE RESERVE PIT WILL BE LINED TO PREVENT SEEPAGE FROM OCCURRING.

8. NA THE RESERVE PIT WILL BE CONSTRUCTED LONG AND NARROW (___X___FEET) SO THAT THE PIT CAN BE ACCOMODATED AND ANY POTENTIAL HAZARDS REDUCED OR ELIMINATED.

9. NA IMMEDIATELY FOLLOWING DRILLING, THE FLUIDS OF THE RESERVE PIT WILL BE PUMPED AND DISPOSED OF PER BLM INSTRUCTIONS. A SUNDRY NOTICE FOR THIS ACTION IS REQUIRED BY BLM.

10. NA DIVERSION DITCH (ES) WILL BE CONSTRUCTED ON THE ____ SIDE OF THE WELL PAD ABOVE/BELOW (CIRCLE ONE) THE CUT SLOPE DIVERTING ANY RUNOFF TO THE _____.

11. NA THE WASH (ES) WILL BE DIVERTED AROUND THE ____ SIDE OF THE WELL PAD.

12. ✓ CULVERT(S) OF SUFFICIENT SIZE WILL BE PLACED ON ALL DRAINAGE CROSSINGS OF THE ACCESS ROAD DETERMINED NECESSARY DURING THE ON-SITE INSPECTION.

13. ✓ NO PRODUCTION FLOWLINES NOR GAS SALES LINES WILL BE CONSTRUCTED UNTIL THEIR RIGHT-OF-WAYS/EASEMENTS ARE INSPECTED AND APPROVED BY THE SURFACE MANAGEMENT AGENCY.

14. NA ANY FLOWLINE(S) (SURFACE/SUBSURFACE) WILL BE CONSTRUCTED PARALLELING NEW AND EXISTING ROAD RIGHT-OF-WAYS, EXCEPT _____.

15. NA THE TOP ____ INCHES OF SOIL OF ANY SUBSURFACE FLOWLINE CONSTRUCTED WILL BE ROLLED/SCRAPED TO ONE SIDE OF THE BLADED LINE AND WILL BE DISTURBED AS LITTLE AS POSSIBLE DURING THE ACTUAL CONSTRUCTION. IMMEDIATELY FOLLOWING INSTALLATION, THE ROLL OF TOPSOIL SALVAGED WILL BE REDISTRIBUTED OVER THE BLADED LINE AND WILL BE RESEEDED IN ACCORDANCE WITH ITEM #2. IN ADDITION TO THIS, ALL AREAS DISTURBED (INCLUDING THE REPLACED TOPSOIL) WILL BE IMPRINTED WITH A LAND IMPRINTER OR SHEEP'S FOOT TYPE ROLLER TO CREATE A PATTERN OF SMALL DEPRESSIONS TO ENHANCE VEGETATIVE REGROWTH. ALL DRAINAGES CROSSED BY THESE LINE(S) WILL BE RESTORED, AS NEAR AS POSSIBLE, TO THEIR ORIGINAL FORM. WATER BARS WILL BE CONSTRUCTED IN ACCORDANCE WITH ITEM #5.

16. ✓ FENCE (S) CROSSED BY THE ACCESS ROAD WILL BE BRACED AND TIED OFF BEFORE CUTTING OF THE WIRES TO PREVENT SLACKENING OF THE FENCELINES. BOTH A GATE AND CATTLEGUARD WHICH MUST BE BIA APPROVED WILL BE INSTALLED. SEE BELOW

17. ✓ STORAGE TANK(S) INSTALLED ON THE LOCATION WILL BE SURROUNDED BY A DIKE OF SUFFICIENT CAPACITY TO CONTAIN 1-1/2 TIMES THE STORAGE CAPACITY OF THE TANK(S).

18. ✓ THE STIPULATIONS SET FORTH IN THE ARCHEOLOGICAL CLEARANCE LETTER DATED 01/07/92 WILL BE STRICTLY ADHERED TO. CLEARANCE NO. HPD-91-624

19. ✓ UPON ABANDONMENT, ALL MATERIAL BROUGHT IN TO PLATE THE SURFACE OF THE L PAD AND/OR THE ACCESS ROAD WILL BE CLEANED UP AND DISPOSED OF PRIOR TO EEDING.

? THE CONSTRUCTION WORK CONDUCTED AT THIS LOCATION WILL NEED TO BE PECTED BEFORE THE DRILL RIG IS MOVED ON THE LOCATION.

ANGES/DEVIATIONS MADE FROM THE APPROVED APD MUST BE CLEARED PPROVED BY THE SURFACE MANAGEMENT AGENCY. THE SURFACE EMENT AGENCY CAN BE CONTACTED AT (505) 368-4427.

Approval has been granted to the land user to struct a fence along the east side of the Hovenweep d. Chuska Energy will be required to install a tleguard on their access road when the fence is structed.

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
FARMINGTON RESOURCE AREA
1235 LAPLATA HIGHWAY
FARMINGTON, NEW MEXICO 87401

TAKE PRIDE IN AMERICA

IN REPLY REFER TO.
3162.3-1 (019)

Chuska Energy Company
#Tower 1F
NOG 8702-1116
SE¼NW¼ sec. 1, T. 40 S., R. 25 E.
San Juan County, Utah

Above Data Required on Well Sign

GENERAL REQUIREMENTS FOR OIL AND GAS OPERATIONS ON FEDERAL AND INDIAN LEASES

In addition to those requirements set forth in the laws, regulations and Onshore Orders, these requirements apply generally to all oil and gas operations on Federal and Indian leases. They apply specifically to the above-described well. Special requirements that apply and are effective for this well, if any, are check-marked in Section VII of these General Requirements. The failure of the operator to comply with these requirements and the filing of required reports will result in strict enforcement of 43 CFR 3163.1 or 3163.2.

I. GENERAL

A. Full compliance with all applicable laws, regulations, and Onshore Orders, with the approved Permit to Drill, and with the approved Surface Use and Operations Plan is required. Lessees and/or operators are fully accountable for the actions of their contractors and subcontractors.

B. Each well shall have a well sign in legible condition from spud date to final abandonment. The sign should show the operator's name, lease serial number, or unit name, well number, location of the well, and whether lease is Tribal or allotted, (see 43 CFR 3162.6(b)).

C. A complete copy of the approved Application for Permit to Drill, along with any conditions of approval, shall be available to authorized personnel at the drill site whenever active drilling operations are under way.

D. For Wildcat wells only, a drilling operations progress report is to be submitted weekly from spud date until the well is completed and the Well Completion Report (Form 3160-4) is filed. The report should be on 8 1/2 x 11 inch paper, and each page should identify the well by; operator's name, well number, location and lease number.

E As soon as practical, notice is required of all blowouts, fires and accidents involving life-threatening injuries or loss of life (See NTL-3A).

2. Well Completion Report (Form 3160-4) will be submitted within 30 days after well has been completed.

3. Two copies of all electrical and open-hole logs run (two copies of the mud log are required if no open hole electric logs are run).

4. A cement evaluation log if cement is not circulated to surface.

III. DRILLER'S LOG

A. The following shall be entered in the daily driller's log:

1. Blowout preventer pressure tests, including test pressures and results.

2. Blowout preventer tests for proper functioning.

3. Blowout prevention drills conducted.

4. Casing run, including size, grade, weight, and depth set.

5. How pipe was cemented, including amount of cement, type, whether cement circulated to surface, location of cementing tools, etc..

6. Waiting on cement time for each casing string.

7. Casing pressure tests after cementing, including test pressure and results.

8 Estimated amounts of oil and gas recovered and/or produced during drillstem tests.

IV. GAS FLARING

A. Gas produced from this well may not be vented or flared beyond an initial, authorized test period of ____*____days or 50 MMcf following its (completion) (recompletion), whichever first occurs, without the prior, written approval of the authorized officer. Should gas be vented or flared without approval beyond the test period authorized above, you may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted, and you shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

* 30 days, unless a longer test period specifically is approved by the authorized officer The 30-day period begins when the casing is first perforated for cased holes, and when Total Depth (TD) is reached for open hole completion

FORM 3

STATE OF UTAH

DIVISION OF OIL, GAS AND MINING

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. Lease Designation and Serial Number: NOC 8702-1116

6. If Indian, Allottee or Tribe Name: Navajo Tribal

1A. Type of Work: DRILL [X] DEEPEN [ ]

7. Unit Agreement Name: N/A

8. Type of Well: OIL [X] GAS [ ] OTHER: SINGLE ZONE [ ] MULTIPLE ZONE [ ]

8. Farm or Lease Name:

2. Name of Operator: Chuska Energy Company

9. Well Number: Tower 1F

3. Address and Telephone Number: 3315 Bloomfield Highway, Farmington, N.M. 87401

10. Field and Pool, or Wildcat: (Wildcat)

4. Location of Well (Footages)
At Surface: 2150' FNL & 2380' FWL
At Proposed Producing Zone: Same

11. QtrQtr, Section, Township, Range, Meridian: Sec. 1, T40S, R25E

14. Distance in miles and direction from nearest town or post office: 8 miles north of Montezuma Creek, Utah

12. County: San Juan

13. State: Utah

15. Distance to nearest property or lease line (feet): 660'

16. Number of acres in lease: 49,997

17. Number of acres assigned to this well:

18. Distance to nearest well, drilling, completed, or applied for, on this lease (feet): '

19. Proposed Depth: 6,130'

20. Rotary or cable tools: Rotary

21. Elevations (show whether DF, RT, GR, etc.): 5167' GR/5180' KB

22. Approximate date work will start: March, 1990

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	K-55, 8 5/8"	24.0	500'	Class 'G'/2% CaCl/1/4 Celloflake
7 7/8"	K-55, 5 1/2"	15.5	6000'	Class 'G'/2% CaCl/1/4 Celloflake

DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

CONFIDENTIAL

SEE ATTACHED FOR 10 POINT DRILLING PLAN AND DETAILED DRILLING PROGRAM

SEP 01 1992

24.

Name & Signature: Barry A. Wieland BARRY A. WIELAND Title: OPERATIONS MANAGER Date: 5-27-93

(This space for State use only)

API Number Assigned: 43-037-31724

Approval: BLM approval 9-1-92

R649-3-3

(1\93) (See Instructions on Reverse Side)

CHUSKA ENERGY COMPANY

3315 BLOOMFIELD HIGHWAY • FARMINGTON, NEW MEXICO 87401 • PHONE (505) 326 5525

September 7, 1993

State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Attn: Mr. R.J. Firth
Associate Director

RE: Utah Division of Oil,Gas and Mining's Reporting Requirements

Dear Mr. Firth:

Enclosed please find the following reports and well logs run on wells drilled by Chuska Energy Company during the period January 1, 1992 forward. The Production Reports were filed in June under a separate cover letter by our home office, Harken Energy Company, out of Dallas. We have received conflicting statements as to whether or not the data was received. Therefore, a second set of Production reports from January 1992 forward are also forwarded to your office under this cover letter.

APD(S), SUNDRY NOTICES AND ENTITY ACTION FORMS

Barnes 18M
Barnes 18M(N)
Brown Hogan 1A-2
Burro 33I
Clay Hill 33-O
Crane 35H
Copperhead 15E
D.C. Anticline 35K
Heron 35H
Heron 35H(A)
Jack 31G
Kokopelli 29I
Lark 19B
Lark 19B(G)
Lighting Rock 2E
Lizard 4M
Lone Mountain Creek 12F-1

10/22/93 D E T A I L W E L L D A T menu: opt 00

api num: 43-037-31729 prod zone: sec 1 twnshp 40 S range 25 E qr-qr ~~SW~~ SE NW

entity: :

well name: TOWN 1F

operator: : CHUSKA ENERGY Company

field: : ~~Wildcat~~ ? (find code) (Sputh Wildcat Field)

meridian:

confidential flag: Y confidential expires: alt addr flag:

* * * application to drill, deepen, or plug back * * *

lease number: NOG 8702-1116 lease type: 2 well type: OW

surface loc: 2150 FNL 2380 FWL unit name:

prod zone loc: 2150 FNL 2380 FWL depth: 6130 proposed zone: IS-DC

elevation: 5167 GR apd date: 7-1-92 auth code: 649-3-3

* * completion information * * date recd: la/pa date:

spud date: compl date: total depth:

producing intervals:

bottom hole: first prod: well status:

24hr oil: 24hr ~~gas~~: 24hr water: gas/oil ratio:

* * well comments: api gravity:

BLM APD Approval Date Used

opt: 21 api: zone: date(yymm): enty acct:

CONFIDENTIAL

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM - FORM 6

OPERATOR CHUSKA ENERGY COMPANY

OPERATOR ACCT. NO N 9290

ADDRESS

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION QQ	SC	TP	RG	COUNTY	SPUD DATE	EFFECTIVE DATE
A	99999	11579	43-037-31727	Cont KOKOPELLI 29I	NESE	29	41S	23E	SAN JUAN		11-3-93
WELL 1 COMMENTS:											
A	99999	11580	43-037-31724	Cont. NORTH RUINS 16K 1	NESW	16	40S	25E	SAN JUAN		11-3-93
WELL 2 COMMENTS:											
A	99999	11581	43-037-31725	SHALENE 11 K	NWSE	11	42S	24E	SAN JUAN		11-3-93
WELL 3 COMMENTS:											
A	99999	11582	43-037-31729	Cont TOWER 1F	SENW	1	40S	25E	SAN JUAN		11-3-93
WELL 4 COMMENTS:											
A	99999	11583	43-037-31730	Cont BOX CANYON 5F	SENW	5	42S	25E	SAN JUAN		11-3-93
WELL 5 COMMENTS:											

ACTION CODES (See instructions on back of form)
- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)

NOTE. Use COMMENT section to explain why each Action Code was selected

(3/89)

L. CORDOVA (DOGM)
Signature

ADMIN. ANALYST
Title

11-3-93
Date

Phone No. (____)

FEBRUARY 8, 1994

TO: WELL FILE

FROM: K. M. HEBERTSON

RE: Status, Tower 1F 43-037-31729 1-40S-25E

Per telephone conversation with the operator concerning the status of this well, it was determined that the well will not be drilled and the operator has acknowledged that the APD has expired. The operator has been informed that the APD will need to be refiled in order to drill this well at a future date.

As of the above date the APD has been rescinded and the file sent to the LA archives.

KMH